

# Mineral Industry Surveys

---

For information, contact:

Daniel Edelstein, Copper Commodity Specialist  
U.S. Geological Survey  
989 National Center  
Reston, VA 20192  
Telephone: (703) 648-4978, Fax: (703) 648-7757  
E-mail: dedelste@usgs.gov

Janet Richards (Data)  
E-mail: jricharl@usgs.gov  
Melissa Foley (Data)  
E-mail: mfoley@usgs.gov  
Telephone: (703) 648-7951  
Fax: (703) 648-8975  
MINES FaxBack: (703) 648-4999  
Internet: <http://minerals.usgs.gov/minerals>

## COPPER IN JANUARY 2000

Mine and primary smelter and refinery production declined slightly in January, falling by 2%, 3%, and 4%, respectively. All were down sharply from January 1999 levels. While estimated copper recovery from old scrap (principally at smelters and refineries) declined slightly in January, copper recovered from new scrap increased by about 8% owing to strong demand and production at brass mills, the principal consumer of new scrap. Consumption of refined copper at brass mills rose by about 12% in January and was up by 3% from that in January 1999. While consumption of refined copper at wire rod mills rose slightly in January, it was 8% below that for January 1999 owing to the closure of two domestic wire rod mills during 1999. In response to growing demand for wire rod by wire manufacturers, U.S. net imports of wire rod (H.T.S. 7408.11.30 and 7408.11.60, adjusted to reflect misclassification of Mexican imports) rose to 164,000 tons in 1999, up from 77,000 tons in 1998. According to USGS shipments data and adjusted trade data, the apparent U.S. demand for wire rod rose from 2.2 million tons in 1998 to 2.3 million tons in 1999.

Imports for consumption of refined copper in 1999 were 837,000 tons, an increase of 154,000 tons over those for 1998. Total imports of refined copper rose to 915,000 tons. The 78,000 ton disparity between imports for consumption and total imports is accounted for by material held under bond in U.S. warehouses and correlates well to a 71,000 ton inventory rise in London Metal Exchange (LME) warehouses located in the United States. Most of this material accumulated in warehouses in New Orleans and Baltimore, where stocks rose by 103,000 tons and 22,000 tons respectively. Inventories held in California warehouses declined by about 50,000 tons. In 1998, the LME placed limits on the quantity of copper held in its California licensed warehouses. (See copper in August 1998.)

On January 26, the U.S. Mint began releasing its new Golden Dollar coin, first to commercial banks, and then to some 3,000 retail stores for circulation beginning on January 30. As of the end

of February, the Mint had shipped 200 million Golden Dollars, four times the annual demand in recent years for the Susan B. Anthony (SBA) coin it was replacing. Unlike the SBA coins, the Golden Dollar is readily distinguished from the quarter by its color and thick smooth edge (U.S. Mint, 2000b). In February, owing to the strong public demand for the new coins, the Mint and the Federal Reserve developed a program to accelerate shipments of Golden Dollars to community banks, credit unions and savings and loans through out the country and anticipated placing a total of 350 million coins in circulation by the end of March and more than one billion by yearend (U.S. Mint, 2000a). The Golden Dollar is a 3-layer clad coin with a solid copper core and manganese bronze cladding. At a coin weight of 8.1 grams and overall composition of 88.5% copper, 6% zinc, 3.5% manganese, and 2% nickel, one billion coins would contain about 7,200 tons of copper. The construction and electromagnetic properties of the coin are similar to those of the SBA coin it is replacing making it compatible with mechanical and electromagnetic coin readers currently in use.

Grupo México, S.A. de C.V. announced that it had completed the sale of the specialty chemicals division of recently acquired ASARCO Incorporated for \$503 million plus the assumption of \$9.3 million in third party debt. Grupo planned to use the net proceeds to pay down the \$817 million debt incurred in the purchase of Asarco (Grupo México, S.A. de C.V., 2000).

## References Cited

- Grupo México, S.A. de C.V., 2000, Grupo México completes sale of Asarco's specialty chemicals division for \$503 million: Mexico City, Grupo México, S.A. de C.V. press release, January 13, 1 p.
- U.S. Mint, 2000a, U.S. Mint and Federal Reserve announce program for direct shipment of Golden Dollars to small financial institutions: Washington, D.C., U.S. Mint press release, February 24, 2 p.
- 2000b, U.S. Mint says public is embracing new "Golden Dollar" coin: Washington, D.C., U.S. Mint press release, February 16, 2 p.

TABLE 1  
SALIENT STATISTICS OF THE COPPER INDUSTRY IN THE UNITED STATES 1/

(Metric tons, unless otherwise specified)

	Source table 2/	1999 p/ December Year		2000 January
Production:				
Primary:				
Mine, recoverable	(2)	123,000	1,600,000	121,000
Smelter 3/	(3)	75,400 r/	1,090,000 r/	72,900
Refinery:				
Electrolytic:				
Domestic	(4)	84,600 r/	1,110,000	80,000
Foreign	(4)	10,500 r/	196,000	9,440
Electrowon	(4)	47,400 r/	584,000	46,900
Total	(4)	143,000 r/	1,890,000	136,000
Secondary recoverable copper:				
Refineries	(5)	20,000	243,000	19,400
Ingot makers 4/	(5)	10,800	130,000	10,800
Brass and wire-rod mills	(5)	66,100	829,000 r/	72,100
Foundries, etc. 4/	(5)	4,280	51,300	4,280
Consumption:				
Apparent	(8)	245,000	3,120,000	NA
Refined (reported)	(7)	228,000	2,990,000	236,000
Purchased copper-base scrap	(9)	146,000	1,810,000	153,000
Stocks at end of period:				
Total refined	(11)	563,000 r/	565,000 r/	574,000
Blister, etc.	(11)	144,000 r/	138,000	127,000
Prices:				
U.S. producer cathode (cents per pound) 5/	(12)	85.414	75.913	88.898
Imports: 6/				
Ores and concentrates 7/	(14)	1	143,000	NA
Refined	(14)	77,500	837,000	NA
Exports: 6/				
Ores and concentrates 7/	(15)	7,550	63,100	NA
Refined	(15)	3,330	25,200	NA

p/ Preliminary. r/ Revised. NA Not available. XX Not applicable.

1/ Data are rounded to three significant digits, except prices; may not add to totals shown.

2/ Numbers in parentheses refer to the detailed tables where these data are located.

3/ From domestic and foreign ores.

4/ Monthly data and 1999 cumulative data estimated based on 1998 monthly average.

5/ Source: Platt's Metals Week.

6/ Source: Bureau of the Census.

7/ Copper content.

TABLE 2  
MINE PRODUCTION OF RECOVERABLE COPPER  
IN THE UNITED STATES 1/

(Metric tons)

Period	Arizona	Others 2/	Total
1999:			
January	99,400	55,500	155,000
February	89,700	48,300	138,000
March	102,000	56,800	159,000
April	95,100	49,300	144,000
May	96,300	47,800	144,000
June	87,300	45,300	133,000
July	86,400	41,400	128,000
August	78,400 r/	41,100	119,000 r/
September	79,400 r/	40,600	120,000 r/
October	81,100 r/	39,900	121,000 r/
November	76,400 r/	39,800 r/	116,000
December	80,500 r/	43,000 r/	123,000
Total	1,050,000	549,000 r/	1,600,000
2000:			
January	80,400	40,300	121,000

r/ Revised.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes production from Alaska, Idaho, Missouri, Montana, Nevada, New Mexico, Tennessee, and Utah.

TABLE 3  
COPPER PRODUCED AT SMELTERS IN THE  
UNITED STATES, BY SOURCE 1/ 2/

(Metric tons, copper content)

Period	Domestic and foreign ores	Scrap	Total
1999: p/			
January	106,000	18,300	125,000
February	113,000	16,100	129,000
March	116,000	14,700	131,000
April	124,000	15,600	140,000
May	85,400	14,000	99,400
June	77,000	18,600	95,700
July	84,100	18,100	102,000
August	91,500	18,300	110,000
September	72,400	18,400	90,700
October	72,100	18,400	90,500
November	68,900	18,500	87,400
December	75,400 r/	18,500	93,900 r/
Total	1,090,000 r/	208,000	1,290,000
2000:			
January	72,900	18,500	91,400

p/ Preliminary. r/ Revised.

1/ Includes blister, anode and black copper from primary or secondary sources.

2/ Data are rounded to three significant digits; may not add to totals shown.

TABLE 4  
PRODUCTION OF REFINED COPPER, BY SOURCE AND METHOD OF RECOVERY 1/

(Metric tons)

Period	Primary materials				Scrap			Total refined
	Electrolytically refined 2/		Electrowon	Total	Electro-lytically refined 2/	Fire refined	Total	
	Domestic 3/	Foreign						
1999: p/								
January	85,400	26,700	52,100	164,000	12,500	8,310	20,800	185,000
February	84,200	24,200	47,300	156,000	12,400	10,200	22,600	178,000
March	117,000	25,600	52,400	195,000	14,700	10,000	24,800	220,000
April	111,000	19,100	49,200	179,000	12,100	6,630	18,700	198,000
May	106,000	12,300	51,000	169,000	11,300	5,960	17,200	186,000
June	95,500	12,100	48,900	157,000	12,500	6,100	18,600	175,000
July	77,300	15,100	48,600	141,000	13,500	8,740	22,300	163,000
August	83,200	11,900	46,600	142,000	13,500	5,770	19,300	161,000
September	90,800	12,700	48,000	152,000	13,400	7,880	21,300	173,000
October	89,700	14,100	46,500	150,000	13,200	6,970	20,200	171,000
November	81,800	12,100	45,900 r/	140,000	13,300	3,900	17,200	157,000 r/
December	84,600 r/	10,500 r/	47,400 r/	143,000 r/	13,700	6,260	20,000	163,000 r/
Total	1,110,000	196,000	584,000	1,890,000	156,000	86,800	243,000	2,130,000
2000:								
January	80,000	9,440	46,900	136,000	13,600	4,760	18,400	155,000

p/ Preliminary. r/ Revised.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Based on source of material at smelter level.

3/ Includes fire-refined copper.

TABLE 5  
COPPER RECOVERABLE IN UNALLOYED AND ALLOYED FORM FROM PURCHASED COPPER-BASE SCRAP 1/

(Metric tons, copper content)

Period	Refineries 2/		Ingot makers 3/		Brass and wire-rod mills		Foundries, etc. 3/		Total 4/
	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	
1999: p/									
January	4,370	16,400	2,900	7,920	64,600	2,740	881	3,400	103,000
February	5,560	17,000	2,900	7,920	66,400	3,030	881	3,400	107,000
March	6,210	18,600	2,900	7,920	72,800	3,070	881	3,400	116,000
April	4,910	13,800	2,900	7,920	67,200	2,540	881	3,400	104,000
May	4,710	12,500	2,900	7,920	66,600	2,020	881	3,400	101,000
June	4,850	13,700	2,900	7,920	67,400	2,410	881	3,400	103,000
July	6,300	16,000	2,900	7,920	64,300	1,630	881	3,400	103,000
August	5,140	14,100	2,900	7,920	67,700	1,470	881	3,400	103,000
September	6,050	15,200	2,900	7,920	66,700	1,480	881	3,400	105,000
October	5,400	14,800	2,900	7,920	69,000	1,380	881	3,400	106,000
November	3,590	13,600 r/	2,900	7,920	67,500 r/	1,410	881	3,400	101,000 r/
December	4,740	15,200	2,900	7,920	64,700	1,420	881	3,400	101,000
Total	61,800	181,000	34,800	95,000	805,000	24,600	10,600	40,800	1,250,000
2000:									
January	4,510	14,900	2,900	7,920	70,700	1,440	881	3,400	107,000

p/ Preliminary. r/ Revised.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Electrolytically refined and fire-refined scrap based on source of material at smelter level.

3/ Monthly data and 1999 cumulative data estimated based on 1998 annual data.

4/ Does not include an estimate, based on reported 1998 data, of 3,540 tons per month from new scrap and 2,840 tons per month from old scrap of copper recovered from scrap other than copper-base.

TABLE 6  
PRODUCTION, SHIPMENTS, AND STOCKS OF BRASS AND WIRE-ROD MILL SEMIFABRICATES 1/

(Metric tons, gross weight)

Period	Production		Shipments		Stocks, end of period	
	Brass mills	Wire rod mills	Brass mills	Wire rod mills	Brass mills	Wire rod mills
1999: p/						
January	138,000	180,000	141,000	174,000	59,500	36,800
February	134,000	178,000	135,000	175,000	58,000	40,100
March	139,000	190,000	146,000	193,000	50,500	37,100
April	144,000	182,000	142,000	184,000	53,300	35,500
May	138,000	181,000	138,000	180,000	53,300	36,400
June	138,000	184,000	140,000	183,000	51,000	37,400
July	122,000	169,000	126,000	169,000	47,600	37,600
August	139,000	187,000	136,000	184,000	51,300	40,900
September	143,000	182,000	139,000	181,000	48,200	42,500
October	140,000	181,000	139,000	179,000	48,700	45,000
November	138,000	174,000	138,000	178,000	49,000	41,200
December	135,000	162,000	132,000	157,000	51,300	46,600
Total	1,650,000	2,150,000	1,650,000	2,140,000	XX	XX
2000:						
January	139,000	157,000	138,000	162,000	52,500	42,000

p/ Preliminary. XX Not applicable.

1/ Data are rounded to three significant digits; may not add to totals shown.

TABLE 7  
CONSUMPTION OF REFINED COPPER 1/

(Metric tons)

Period and item	Wire rod mills	Brass mills 2/	Other plants 3/	Total
1999: p/				
January	186,000	58,400	4,730	249,000
February	185,000	50,900	4,730	240,000
March	209,000	55,500	4,730	270,000
April	184,000	53,800	4,730	243,000
May	185,000	60,100	4,730	250,000
June	189,000	59,900	4,730	254,000
July	174,000	58,500	4,730	238,000
August	201,000	58,400	4,730	264,000
September	187,000	60,700	4,730	252,000
October	192,000	62,300	4,730	259,000
November	184,000 r/	59,700 r/	4,730	248,000
December	170,000	53,600	4,730	228,000
Total	2,250,000	692,000 r/	56,700	2,990,000
2000:				
January:				
Cathodes	168,000	41,200	940	210,000
Wire bars	--	--	W	W
Ingots and ingot bars	--	1,520	1,600	3,130
Cakes and slabs	W	7,710	W	7,710
Billets and other	3,520	9,560	2,180	15,300
Total	171,000	60,000	4,730	236,000

p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company proprietary data; included with "Billets and other."

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ In 1998, brass mills consumed 1,500 tons of refined lead, 600 tons of pig tin, 2,400 tons of refined nickel, and 53,200 tons of slab zinc.

3/ Consumption by ingot makers, chemical plants, foundries, and miscellaneous manufacturers is estimated based on 1998 annual data.

TABLE 8  
U.S. APPARENT CONSUMPTION OF COPPER 1/

(Metric tons)

Period	Refined copper production	Copper in old scrap 2/	Refined general imports 3/	Refined exports 3/	Stock change during period	Apparent consumption
1999: p/						
January	164,000	33,300	64,700	2,350	26,000	234,000
February	156,000	34,200	58,500	1,120	24,700	223,000
March	195,000	35,800	86,000	1,840	31,300	284,000
April	179,000	30,500	66,300	1,340	28,000	246,000
May	169,000	28,700	57,100	1,630	3,080	250,000
June	157,000	30,300	60,600	4,240	(24,300)	268,000
July	141,000	31,800	61,000	1,560	(14,100)	246,000
August	142,000	29,700	79,600	1,500	(13,500)	263,000
September	152,000	30,800	85,200	1,180	(30,300)	297,000
October	150,000	30,300	106,000	1,400	8,400	277,000
November	140,000	29,200 r/	114,000	3,710	(8,230) r/	288,000 r/
December	143,000 r/	30,800	76,300	3,330	1,470 r/	245,000
Total	1,890,000	375,000	915,000	25,200	32,500	3,120,000
2000:						
January	136,000	30,500	NA	NA	9,800	NA

p/ Preliminary. r/ Revised. NA Not available.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes reported monthly production of copper from old scrap of copper-base and estimates for annual reporters and of non-copper-base materials based on 1998 data.

3/ Source: Bureau of the Census.

TABLE 9  
CONSUMPTION OF PURCHASED COPPER-BASE SCRAP 1/

(Metric tons, gross weight)

Period	Smelters and refineries		Ingot makers 2/		Brass and wire-rod mills 3/		Foundries, etc. 2/		Total scrap used
	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	
1999: p/									
January	5,440	43,300	3,850	11,200	81,200	2,800	1,060	3,780	153,000
February	6,570	42,800	3,850	11,200	83,900	3,130	1,060	3,780	156,000
March	6,700	39,600	3,850	11,200	92,500	3,170	1,060	3,780	162,000
April	5,430	38,300	3,850	11,200	85,700	2,620	1,060	3,780	152,000
May	5,390	36,400	3,850	11,200	84,300	2,090	1,060	3,780	148,000
June	5,470	36,100	3,850	11,200	85,500	2,500	1,060	3,780	150,000
July	6,470	37,300	3,850	11,200	80,500	1,690	1,060	3,780	146,000
August	5,200	35,700	3,850	11,200	84,400	1,530	1,060	3,780	147,000
September	6,130	36,800	3,850	11,200	84,300	1,550	1,060	3,780	149,000
October	5,980	37,200	3,850	11,200	87,600	1,450	1,060	3,780	152,000
November	3,650	35,600	3,850	11,200	86,100	1,470	1,060	3,780	147,000
December	4,810	37,000	3,850	11,200	82,300	1,490	1,060	3,780	146,000
Total	67,200	456,000	46,200	135,000	1,020,000	25,500	12,700	45,400	1,810,000
2000:									
January	4,570	37,100	3,850	11,200	89,500	1,480	1,060	3,780	153,000

p/ Preliminary.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Monthly data and 1999 cumulative data estimated from 1998 annual data.

3/ Consumption at brass and wire-rod mills assumed equal to receipts.

TABLE 10  
CONSUMPTION OF PURCHASED COPPER-BASE SCRAP 1/ 2/

(Metric tons, gross weight)

Scrap type and processor	1999 p/				2000
	January	November	December	Year	January
No. 1 wire and heavy:					
Smelters and refiners	5,930	4,240	7,260	85,700	6,810
Brass and wire-rod mills	35,600	35,300 r/	33,900	429,000 r/	37,700
No. 2 mixed heavy and light:					
Smelters and refiners	17,100 r/	10,900	10,500	144,000	10,700
Brass and wire-rod mills	1,920	1,380	1,310	21,200	1,800
Total unalloyed scrap:					
Smelters and refiners	23,000 r/	15,100	17,700	230,000	17,500
Brass and wire-rod mills	37,500	36,700 r/	35,200	451,000	39,500
Red brass: 3/					
All plants	5,490 r/	5,280	5,180	64,600	5,220
Leaded yellow brass:					
All plants	31,600 r/	35,200	35,000	423,000	36,500
Yellow and low brass:					
All plants	6,810 r/	6,430	6,510	75,100	6,500
Cartridge cases and brass:					
Smelters and refiners	W	W	W	W	W
Brass mills	6,710	6,570 r/	5,920	78,400	6,170
Auto radiators:					
Smelters and refiners	5,610 r/	5,570	5,570	67,200	5,570
Bronzes:					
Smelters and refiners	1,100 r/	1,100	1,100	13,200	1,100
Brass mills	1,090	1,020 r/	797	9,870 r/	776
Nickel-copper alloys:					
All plants	1,490 r/	2,560 r/	1,900	22,300	2,970
Low grade and residues:					
Smelters and refiners	24,600 r/	23,700	23,700	287,000	23,700
Other alloy scrap: 4/					
Smelters and refiners 5/	2,420 r/	1,680	1,680	21,800	1,680
Brass mills	409	529 r/	478	5,060 r/	478
Total alloyed scrap:					
Smelters and refiners	40,800 r/	39,200	39,200	474,000	39,200
Brass mills	46,500	50,400 r/	48,600	593,000	51,500
Total scrap:					
Smelters and refiners	63,800 r/	54,300	56,900	705,000	56,700
Brass and wire-rod mills	84,000	87,200 r/	83,800	1,040,000	90,900

p/ Preliminary. r/ Revised. W Withheld to avoid disclosing company proprietary data.

1/ Does not include: consumption by foundries, chemical plants, and miscellaneous manufacturers, estimated to total about 4,840 tons of scrap per month in 1998; monthly data include estimates of about 17,600 tons of scrap per month consumed by ingot makers and several smelters that report on an annual basis.

2/ Data are rounded to three significant digits; may not add to totals shown.

3/ Includes composition turnings, silicon bronze, zincy bronze, railroad car boxes, cocks and faucets, gilding metal, and commercial bronze.

4/ Includes refinery brass, beryllium copper, phosphor copper, and aluminum bronze.

5/ Includes items indicated by symbol "W."

TABLE 11  
COPPER STOCKS AT END OF PERIOD 1/

(Metric tons)

Period	Crude copper 2/	Refined copper					Total refined	
		Refineries 3/	Wire rod mills 3/	Brass mills 3/	Other 4/	Comex 5/		LME 6/
1999: p/								
January	143,000	45,600	43,100	20,600	3,870	92,400	353,000	558,000
February	148,000	44,100	32,400	22,000	3,870	104,000	377,000	583,000
March	132,000	48,200	29,700	21,000	3,870	112,000	400,000	614,000
April	147,000	49,200	27,200	21,200	3,870	120,000	420,000	642,000
May	132,000	43,200	34,700	20,600	3,870	119,000	424,000	645,000
June	134,000	26,600	32,500	18,600	3,870	121,000	418,000	621,000
July	137,000	14,100	38,100	20,500	3,870	109,000	421,000	607,000
August	154,000	18,100	29,900	18,600	3,870	98,700	424,000	593,000
September	149,000	14,300	34,300	16,600	3,870	88,500	406,000	563,000
October	140,000	14,300	37,800	18,400	3,870	82,400	415,000	571,000
November	144,000 r/	11,500	34,100 r/	21,400 r/	3,870	82,400	410,000	563,000 r/
December	138,000	9,830 r/	32,500	23,800	3,870	83,100	412,000	565,000 r/
2000:								
January	127,000	9,070	40,300	25,800	3,870	86,700	409,000	574,000

p/ Preliminary. r/ Revised.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Copper content of blister and other materials in transit and in process of refining.

3/ Stocks of refined copper as reported; no estimates are made for non-respondents.

4/ Monthly estimates based on reported and 1998 annual data, comprising stocks at secondary smelters, chemical plants, foundries, and miscellaneous manufacturers.

5/ Commodity Exchange Inc., New York.

6/ London Metal Exchange Ltd., U.S. warehouses.

TABLE 12  
AVERAGE PRICE OF COPPER IN THE UNITED STATES AND  
ON THE LONDON METAL EXCHANGE

(Cents per pound)

Period	U.S. producers delivered price cathode 1/	Comex first position 2/	LME cash price Grade A
1999:			
January	68.726	65.066	64.902
February	67.594	63.934	63.974
March	66.164	62.504	62.505
April	70.662	67.002	66.475
May	72.720	69.060	68.528
June	69.037	65.227	64.506
July	79.677	76.017	74.371
August	79.692	75.882	74.715
September	84.748	80.888	79.379
October	83.364	79.300	78.186
November	83.162	79.098	78.343
December	85.414	81.350	80.029
Year	75.913	72.111	71.326
2000:			
January	88.898	84.834	83.624

1/ Listed as "U.S. producer cathode."

2/ Listed as "Comex high grade first position."

Sources: Platt's Metals Week and American Metal Market.



TABLE 13  
NEW YORK AVERAGE BUYING PRICES FOR COPPER SCRAP

(Cents per pound)

Month	Brass mills No. 1 scrap	Refiners No. 2 scrap	Dealers (New York)	
			No. 2 scrap	Red brass turnings and borings
1999:				
January	64.11	51.17	39.32	36.00
February	63.13	51.07	39.00	36.84
March	62.04	50.75	39.00	38.00
April	65.94	54.58	39.00	38.00
May	68.59	56.68	42.80	38.95
June	64.69	52.57	41.55	36.82
July	74.99	62.69	42.71	36.57
August	74.86	61.67	44.00	37.00
September	79.25	63.51	45.00	37.67
October	77.51	61.30	47.00	39.00
November	76.76	61.46	47.20	39.00
December	78.70	62.95	49.00	39.00
Year	70.88	57.53	42.97	37.74
2000:				
January	82.48	66.30	49.00	39.00

Source: American Metal Market.

TABLE 14  
U.S. IMPORTS FOR CONSUMPTION OF COPPER (UNMANUFACTURED), BY CLASS 1/

(Metric tons, copper content)

Country or territory	Ore and concentrate			Matte, ash and precipitates			Blister and anodes			Refined		
	1999			1999			1999			1999		
	1998	December	January - December	1998	December	January - December	1998	December	January - December	1998	December	January - December
Argentina	9,930	--	--	--	--	--	--	--	--	--	--	--
Brazil	--	--	--	--	--	--	--	--	--	9,000	2,500	13,600
Canada	1,690	--	3	140	--	4	82,100	5,850	79,400	265,000	22,100	258,000
Chile	147,000	--	110,000	--	--	--	24,100	12,100	87,000	78,700	9,610	145,000
Denmark	--	--	--	54	--	--	--	--	--	--	--	--
Indonesia	29,400	--	31,900	--	--	--	--	--	--	--	--	--
Japan	--	--	--	240	--	49	(2/)	--	(2/)	8,680	1,210	5,600
Kazakhstan	--	--	--	--	--	--	--	--	--	--	503	15,300
Malaysia	--	--	--	14	--	76	--	--	--	--	--	--
Mexico	4,980	--	500	998	59	987	29,400	1,030	19,700	178,000	5,670	107,000
Namibia	--	--	--	--	--	--	3,360	--	--	--	--	--
Netherlands	--	--	--	551	--	369	--	--	--	4,570	1,870	3,660
Papua New Guinea	5,900	--	--	--	--	--	--	--	--	--	--	--
Peru	18,200	--	--	--	--	--	6,870	1,000	5,380	128,000	21,500	211,000
Russia	--	--	--	--	--	--	--	--	--	9,170	4,890	49,300
South Africa	--	--	--	--	--	--	2,830	--	--	--	40	1,170
Spain	--	--	--	--	--	--	1,440	--	568	1,300	--	11,000
Taiwan	--	--	--	213	19	230	--	--	16	42	--	62
Other	12	1	13	25	--	9	36	434	530	1,210	7,580	16,500
Total	217,000	1	143,000	2,230	78	1,730	150,000	20,400	193,000	683,000	77,500	837,000

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Less than 1/2 unit.

Source: Bureau of the Census.

TABLE 15  
U.S. EXPORTS OF COPPER (UNMANUFACTURED), BY CLASS 1/

(Metric tons, copper content)

Country or territory	Ore and concentrate			Matte, ash and precipitates			Blister and anodes			Refined		
	1999			1999			1999			1999		
	January -			January -			January -			January -		
	1998	December	December	1998	December	December	1998	December	December	1998	December	December
Belgium	39	--	17	323	--	4	961	90	177	17	--	404
Canada	33,600	2,680	30,000	12,800	648	25,300	16,400	1,220	20,500	16,100	616	13,800
China	--	--	18,100	--	--	10	63	--	264	360	(2/)	253
France	--	--	1	30	--	--	554	--	160	37	(2/)	29
Germany	1,470	--	74	6,660	170	430	92	56	212	294	--	274
Hong Kong	15	--	33	--	--	--	3,350	244	3,410	1,310	--	215
Italy	34	--	--	--	--	--	354	54	541	69	--	16
Japan	1,050	16	98	34	11	660	695	76	1,350	17,000	--	84
Korea, Republic of	46	--	14	15	--	43	130	17	520	2,870	138	164
Mexico	97	4,830	13,500	1,060	20	123	1,330	11	107	11,200	114	1,430
Netherlands	3	--	70	4	--	10	2	--	2	10,100	--	21
Peru	--	--	1,040	--	--	--	--	--	20	--	--	--
Singapore	--	--	--	6	--	--	726	64	629	687	--	1
Sweden	--	--	--	945	--	--	--	--	--	3	2	2
Taiwan	(2/)	--	--	--	--	14	1,800	164	1,690	19,100	2,410	8,060
Thailand	18	--	--	--	--	6	46	--	41	5,830	--	--
Other	197	31	223	115	20	110	599	75	1,110	1,290	48	438
Total	36,500	7,550	63,100	22,000	869	26,700	27,100	2,070	30,800	86,200	3,330	25,200

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Less than 1/2 unit.

Source: Bureau of the Census.

TABLE 16  
U.S. COPPER SCRAP TRADE 1/

(Metric tons, gross weight)

Country or territory	Imports						Exports					
	Unalloyed			Alloyed			Unalloyed			Alloyed		
	1999			1999			1999			1999		
	January -			January -			January -			January -		
	1998	December	December	1998	December	December	1998	December	December	1998	December	December
Belgium	80	--	--	476	--	215	2,730	87	1,540	434	53	361
Canada	30,900	563	6,760	55,800	4,010	48,200	39,600	3,470	31,800	68,200	2,550	35,700
Chile	3,310	--	5,520	1,440	76	1,470	--	3	3	3	--	--
China	--	--	--	101	90	1,410	28,600	6,690	51,300	20,700	2,640	34,800
Colombia	836	44	690	2,560	135	2,780	--	--	--	4	12	12
Costa Rica	800	73	726	778	48	840	--	--	--	--	--	--
Dominican Republic	942	80	1,200	1,250	70	960	--	--	--	--	--	20
Germany	6	--	11	54	--	134	7,800	52	1,120	5,920	230	2,120
Guatemala	519	29	106	969	163	1,670	--	--	--	--	--	--
Hong Kong	--	--	--	113	--	11	14,400	1,070	9,390	23,600	634	4,040
India	--	--	--	--	--	--	3,460	112	2,580	24,900	2,200	26,100
Jamaica	491	25	347	571	76	566	--	--	--	--	--	--
Japan	19	24	292	126	--	49	10,200	1,330	10,500	10,400	624	9,690
Korea, Republic of	15	--	--	150	36	345	2,720	833	7,630	11,600	2,770	34,800
Malaysia	--	--	--	1,440	55	873	286	40	192	234	18	436
Mexico	12,900	1,500	16,300	35,400	2,130	29,400	1,230	465	1,610	10,200	2,890	20,700
Singapore	--	--	2	143	--	77	266	98	1,960	173	129	213
Spain	12	--	16	477	84	1,290	60	--	2,760	1,860	1,460	2,670
Taiwan	109	--	16	720	33	554	2,110	511	4,120	6,210	598	7,510
United Kingdom	--	--	120	1,090	360	2,450	176	--	555	3,890	17	1,700
Venezuela	462	72	675	1,500	183	1,980	--	--	--	37	--	36
Other	2,990	224	1,600	6,170	618	6,540	495	50	1,260	5,000	802	5,940
Total	54,400	2,630	34,400	111,000	8,160	102,000	114,000	14,800	128,000	193,000	17,600	187,000

1/ Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.

TABLE 17  
U.S. COPPER SULFATE TRADE 1/

(Metric tons, gross weight)

Country or territory	Imports									Exports								
	1999									1999								
	1998	First quarter	Second quarter	Third quarter	Fourth quarter				Year	1998	First quarter	Second quarter	Third quarter	Fourth quarter				Year
					October	November	December	Total						October	November	December	Total	
Australia	--	--	--	--	--	--	--	--	--	78	6	17	3	3	--	3	6	32
Belgium	715	225	311	203	78	101	149	328	1,070	--	--	--	--	--	--	--	--	--
Canada	5,490	1,430	1,700	1,560	432	251	590	1,270	5,970	955	98	205	136	55	18	33	106	546
Chile	282	124	173	109	21	--	--	21	427	--	--	--	--	--	--	--	--	--
China	6,240	238	242	172	6	80	79	165	818	--	--	--	119	--	--	--	--	119
Egypt	--	--	--	--	--	--	--	--	--	7	8	--	--	--	--	--	--	8
Guatemala	--	--	--	--	--	--	--	--	--	10	10	--	14	--	55	--	55	80
Honduras	--	--	--	--	--	--	--	--	--	--	--	29	--	--	--	37	37	66
Israel	1,210	305	20	22	--	--	20	20	368	--	--	--	--	--	--	--	--	--
Jordan	--	--	--	--	--	--	--	--	--	--	10	--	--	--	--	--	--	10
Korea, Republic of	198	--	--	--	--	--	--	--	--	19	10	--	12	--	--	--	--	22
Mexico	10,500	2,470	2,130	2,480	634	723	703	2,060	9,140	38	5	1	22	4	4	15	22	50
New Zealand	--	--	--	--	--	--	--	--	--	--	4	--	7	--	--	--	--	11
Pakistan	--	--	--	--	--	--	--	--	--	--	--	19	--	--	--	--	--	19
Peru	1,740	301	573	518	219	98	182	499	1,890	--	--	--	--	--	--	--	--	--
Russia	840	280	--	327	101	60	--	161	768	--	--	--	--	--	--	--	--	--
Singapore	--	--	--	--	--	--	--	--	--	20	55	--	19	--	--	10	10	84
Spain	--	--	--	--	--	--	--	--	--	--	--	13	6	--	--	--	--	19
Taiwan	219	1,190	3,190	1,650	56	37	--	93	6,120	--	--	--	--	--	--	--	--	--
Other	160	8	52	44	43	6	4	53	158	215	--	6	7	--	1	--	1	14
Total	27,600	6,580	8,390	7,080	1,590	1,360	1,730	4,670	26,700	1,340	206	291	344	62	78	97	237	1,080

1/ Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.